

DESCRIPTION OF RELATED ART:

U.S. Patent Documents

5	5,987,606	Nov., 1999	Cirasole, et al.
	6,161,133	Dec., 2000	Kikinis
	6,240,462	May, 2001	Agraharam, et al.
	5,970,477	Oct., 1999	Roden
	6,249,527	Jun., 2001	Verthein, et al.
10	5,974,463	Oct., 1999	Warrier, et al.
	5,983,282	Nov., 1999	Yucebay
	5,889,845	Mar., 1999	Staples, et al.

The ensoBox™ is an Internet Service Provider (ISP) appliance. An Internet appliance can be classified as a ready-to-use device that supports a specific Internet requirement. The software to support this appliance is pre-installed in the factory, is typically proprietary in nature, and is purchased in conjunction with the associated hardware. An appliance supports a plug-and-play configuration to allow for easy installation and management by the appliance's owner. An Internet appliance does not require the separate purchase of hardware and software, and then the subsequent systems integration by the owner.

An ISP appliance provides the functionality of an ISP into a device or cluster of devices where hardware and software are integrated in such a manner that the owner of the ISP appliance can be a fully functional, fully independent, self-supported ISP. An ISP appliance, at a minimum, should support the following basic ISP functions:

A direct connection to the Internet (T1 or higher speeds)

Dial-up access to the Internet

Basic features and functionality such as:

1. Security
2. Content filtering
3. Content caching
4. Data warehousing
5. DNS

A robust and flexible services offering including:

1. Web portal
2. Email
3. Web hosting
4. Chat
5. News
6. Anonymous FTP
7. Instant Messaging
8. Content packages (games, music, videos, auctions, news, etc.)
9. Video conferencing
10. e-Commerce Services (on-line shopping, banking, etc.)

Back office management software to allow an ISP Franchise to manage subscriber accounts, billing, trouble reporting, and performance monitoring.

The ensoBox™ meets all the above stated ISP requirements and was built to be flexible enough to expand for future Internet applications.

BRIEF SUMMARY OF THE INVENTION:

The ensoBox™ provides ISP Franchise subscribers with dial-up access to the Internet, features and functionality that are characteristic of ISPs, a suite of services including a Web Portal, email, web hosting, chat, news, and anonymous FTP, and access to the Internet (browsing the WWW). It also supplies an ISP Franchise owner with back office management software known as ensoOS™ that is required of an ISP to properly service and manage its subscriber base. ensoOS™ client software is installed on the ensoBox™, but is dependent on applications that are hosted at the ensoport.com™ data center. The data center is the home to the ensoOS™ Applications Infrastructure, which is responsible for all back office support for enoport.com™, Inc, and the ISP Franchises.

Refer to the ensoOS™ Technical Description for more details on ensoOS™ and Applications Infrastructure.

The ensoBox™ is comprised of three modular nodes referred to as the Core Node, Access Node, and Services Node. Each node performs a specific function and is dependent on one another to support all of the ISP features, functionality, and services offered by the ensoBox™. The ensoBox™ can be

installed almost anywhere in the world, as long as there is proper power and facilities to meet the ensoBox™ environmental requirements (refer to the ensoBox™ Site Requirements Document for specific details). The basic Digital T1¹ configurations support between 4,000 and 8,000 subscribers. The basic Digital E1² and Analog P1³ configurations support between 5,000 and 10,000 subscribers. The ensoBox can be scaled to support up to 50,000 subscribers by adding Remote Access Servers (Cisco AS5300) to the Access Node.

The ensoBox™ currently provides dial-up access to services and the Internet only. Subscribers can connect to the ensoBox™ via a 56 Kbps analog phone line. In the future, the ensoBox™ will offer ISDN, high speed DSL, and wireless access. Subscribers are identified by a unique userid/password combination and are required to supply that information each time a dial up session to the ensoBox™ is established. All subscribers have access to a web portal, email, web hosting, chat, news, and anonymous FTP. In the future, ISP Franchises will be able to offer pay services (above the standard pricing) for services such as video conferencing, games, etc.

¹ A standard ensoBox™ access node can be configured with 8, 12, or 16 T1s and is known as the ensoBox™ Access Node T1 Digital 1000, ensoBox™ Access Node T1 Digital 1500, or ensoBox™ Access Node T1 Digital 2000 respectively.

² A standard ensoBox™ access node can be configured with 8, 12, or 16 E1s and is known as the ensoBox™ Access Node E1 Digital 1000, ensoBox™ Access Node E1 Digital 1500, or ensoBox™ Access Node E1 Digital 2000 respectively.

³ A standard ensoBox™ access node can be configured with 240, 360, Or 480 analog modems and is known as the ensoBox™ Access Node P1 Analog 1000, ensoBox™ Access Node P1 Analog 1500, or ensoBox™ Access Node P1 Analog 2000 respectively.